AMENDMENTS TO CLAIMS

1.   (currently amended)   A method of determining a wireless system capacity comprising the steps of:

determining a reverse noise floor;

obtaining a plurality of forward code domain measurements and corresponding reverse noise measurements, wherein each of the plurality of forward code domain measurements include a data set having a timestamp, a plurality of code IDs, and power levels for each code ID; and,

determining a maximum number of users such that the probability of exceeding a predetermined reverse noise rise is below a threshold.

2.   (original)   The method of claim 1 wherein the forward code domain measurements comprise the number of active forward links.

3.   (original)   The method of claim 1 wherein the step of determining a reverse noise floor is performed by obtaining reverse noise measurements during a period of inactivity.

4.   (original)   The method of claim 1 wherein the step of determining a maximum number of users includes determining revere noise rise measurements by comparing the reverse noise measurements to the reverse noise floor.

5.   (original)   The method of claim 1 wherein the forward code domain measurements and reverse noise measurements are obtained substantially simultaneously.

6.   (original)   The method of claim 1 wherein the step of determining a maximum number of users includes, using measurements corresponding to those at or below a specific

MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP
300 SOUTH WACKER DRIVE
CHICAGO, ILLINOIS 60606
TELEPHONE (312) 913-0001

2

ATTORNEY DOCKET NO.: 03-397
S/N: 10/789,843
FILING DATE: FEBRUARY 27, 2004

number of active sessions, forming a ratio of the number of measurements having an RNR below 3 decibels to the number of measurements corresponding to those at or below a specific number of active sessions, and comparing the ratio to a confidence level.

7.   (original)   The method of claim 1 wherein the plurality of forward code domain measurements are obtained from a base station transceiver.

8.   (canceled)

9.   (currently amended)   A method of determining a wireless system capacity comprising the steps of:

modifying at least one system parameter;

determining a reverse noise floor;

obtaining a plurality of forward code domain measurements and corresponding reverse noise measurements; and,

determining a maximum number of users such that the probability of exceeding a predetermined reverse noise rise (RNR) is below a threshold, wherein the probability is determined from a ratio of the number of measurements having an RNR below 3 decibels to the number of measurements corresponding to those at or below a specific number of active sessions.

10.   (original)   The method of claim 9 wherein the forward code domain measurements comprise the number of active forward links.

11.   (original)   The method of claim 9 wherein the step of determining a reverse noise floor is performed by obtaining reverse noise measurements during a period of inactivity.

McDONNELL BOEHNEN HULBERT & BERGHOFF LLP
300 SOUTH WACKER DRIVE
CHICAGO, ILLINOIS 60606
TELEPHONE (312) 913-0001

3

ATTORNEY DOCKET NO.: 03-397
S/N: 10/789,843
FILING DATE: FEBRUARY 27, 2004

12.   (original)   The method of claim 9 wherein the step of determining a maximum number of users includes determining reverse noise rise measurements by comparing the reverse noise measurements to the reverse noise floor.

13.   (original)   The method of claim 9 wherein the forward code domain measurements and reverse noise measurements are obtained substantially simultaneously.

14.   (currently amended)   The method of claim 9 wherein the step of determining a maximum number of users includes, ~~using measurements corresponding to those at or below a specific number of active sessions, forming a ratio of the number of measurements having an RNR below 3 decibels to the number of measurements corresponding to those at or below a specific number of active sessions, and~~ comparing the ratio to a confidence level.

15.   (original)   The method of claim 9 wherein the plurality of forward code domain measurements are obtained from a base station transceiver.

16.   (original)   The method of claim 9 wherein the forward code domain measurements include a plurality of data sets, each set having a timestamp, a plurality of code IDS, and power levels for each code ID.

17.   (original)   The method of claim 9 wherein the said at least one system parameter is a power control parameter.

McDonnell Boehnen Hulbert & Berghoff LLP
300 South Wacker Drive
Chicago, Illinois 60606
Telephone (312) 913-0001

4

Attorney Docket No.: 03-397
S/N: 10/789,843
Filing Date: February 27, 2004

18.   (original)   The method of claim 9 wherein the said at least one system parameter is a mobile access probe parameter.